Economic Growth and the Exchange of Political Support for Rent

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ABSTRACT

This paper develops a model of political support which it links to economic growth. Governments face a trade-off between wealth creation and rent creation as sources of support. A low rent-seeking option maximizes support only if 'inclusiveness,' as defined here, is high. Otherwise state efforts to promote growth also promote rent seeking, and the rent-seeking effect comes to dominate the growth effect. In particular, rent seeking crowds out innovation and new product R&D. Depending on comparative political advantage, the quest for support can become the road to serfdom, but it can also become the road to an inclusive polity.

I. Introduction

Empirical studies strongly suggest that rent seeking lowers economic growth [Del Rosal 2011, pp. 316-17; Murphy, Shleifer, and Vishny 1991; Salinas-Jimenez and Salinas-Jimenez 2011; Gill and Kharas, 2007] by reducing efficiency and total factor productivity. Here 'rent' refers to distributional rent, such as the profit from a protected market position, and 'rent seeking' to competition for these rents by rent seekers who offer political support in return. Rent seekers trade support in the form of money, resources, information, image-building, suppression of dissent, intimidation of political rivals, etc. for rent. Each government is assumed to maximize its political support, indexed by U, and to use its power over the creation and allocation of rent to this end.

Thus a government will adopt economic policies only when these policies raise its support, no matter how effective they may be at increasing prosperity and growth. The property of a political system that deters distributional rent seeking is 'inclusiveness,' indexed by ψ, basically an inability to divide society into insiders and outsiders in a way that allows a support-maximizing government to rely on insiders for most of its support. If ψ is high, rent seeking will be low, but if ψ is low, rent seeking will be high and efficiency will be low, however sharp the policy-maker's toolkit. In *Why Nations Fail*, Acemoglu and Robinson [2012] also associate inclusiveness with

efficiency, although without defining inclusiveness in a quantifiable way (pp. 74-75; 80-81). Because the quest for political support links the economic and political systems, differences in the former are often rooted in differences in the latter, and neither system can be understood apart from the other. If we start from a political support maximum, economic reforms will only be feasible in a package with political reforms that make the economic changes support-increasing. A government will adopt such a package only if it gains support thereby. Thus the problem is to bring to power a government that can gain support by raising ψ if ψ is not already high.

The thread linking rent seeking and growth is an aggregate production function from which we derive a production frontier, *TR*, in rent seeking, *R*, and wealth creation in the form of useful output, *Y*. Here *Y* indexes aggregate present plus expected future consumption measured in present value and is valued in competitive prices. *R* indexes the volume of political support provided or financed by rent seekers in exchange for rent. Also $Y = (Y - G) + G$, where *G* is rent-seeking profit and $Y - G$ is all other *Y*. A government's political support is given by $U = U[(Y - G), G, R; \psi]$; a specific form of *U* with ψ as parameter will be derived. Given government support maximization, the growth of *Y* and *R* takes place along a path on which *U* remains tangent to short-run *TR* as *TR* shifts outward owing to increases in inputs and improved technology. This is an 'equilibrium' growth path if intended savings equal intended gross investment plus the current account surplus and if the rates of technological progress and growth of capital are both sustainable at current levels.

Rent seeking in the context of growth recalls the work of Olson [1982], who argued that over time democracies accumulate large numbers of narrow special interests, or 'distributional coalitions.' These dominate 'encompassing coalitions' that are more inclined to represent the interests of society as a whole. Being larger and more diverse, encompassing coalitions find it harder to overcome the free rider barrier to organizing for effective political action. Thus rent seeking leads to growing regulation, redistribution, and restrictions on competition plus declining innovation and growth. Even without encompassing coalitions, however, the institutions of inclusiveness can make it hard for governments to gain support by acceding to the redistributive demands of special interests.

In what follows, we first set out the aggregate production function and use it to identify types of economic growth. We then introduce a model of government support maximization and show how ψ determines the role of rent seeking. There are three types of growth in terms of the sources of growth. In two of these, government often plays a major role in promoting growth, and this provides an entrée for rent seeking. Failure of government to regulate can also give rise to rent seeking; this possibility will be related to the Financial Crisis of 2008-9 and subsequent 'Great Recession'.

II. Types of Economic Growth

In Parente and Prescott [2004]—hereafter P & P—the aggregate production function takes the Cobb-Douglas form, with constant returns to scale and Hicks-neutral technology, which they claim provides a good empirical fit to the growth experiences of many nations. For any given economy, we write this as:

$$\text{GDP} = Y + \pi_R R = (Y - G) + V = E^*AK^{\theta}N^{1-\theta}. \quad (1).$$

Here GDP is gross domestic product or national income, Y is useful output, R is rent-seeking output or the output of political support provided in exchange for rent, π_R is the price of R in units of Y, and $V = G + \pi_R R$ is distributional rent that arises from supply restrictions and other government interventions. V can be broken down into rent-seeking cost, $\pi_R R$, and rent-seeking profit, G.

Since $(Y - G)$ = (GDP – V), or GDP net of distributional rent, (GDP – V) is the income from producing Y, while V* is the income from producing A*. Also K is the economy's stock of physical and human capital used in production, N is labor, A is the world's stock of technological knowledge, E* is the efficiency with which this economy uses A, K, and N to produce GDP, and θ is capital's share of value added. E^*A is total factor productivity (*TFP*) in producing GDP. Increases in E^*A magnify output without affecting the marginal rate of substitution of N for K at any given K/N. The elasticity of substitution, ε_S, between labor and capital is constant at one, and E* varies between zero and one.

We can re-write (1a) as:

$$Y = E^*AK^{\theta}N^{1-\theta} - \pi_R R = EAK^{\theta}N^{1-\theta}. \quad (1a).$$

Here $E = (1 - S_R)E^* = S_Y E^*$ where $S_R = \pi_R R/\text{GDP}$ is the share of R in GDP, and $S_Y = Y/\text{GDP}$ is the share of Y. Like E^*, E varies between zero and one, with $E < E^*$ whenever $R > 0$. $TFP_Y = EA$ is total factor productivity in producing Y. If we divide both sides of (1a) by N, we have:

$$y = EAk^{\theta}, \qquad (2).$$

where $y = Y/N$ is output per unit of labor and $k = K/N$ is capital per unit of labor.

In (1), (1a), and (2), the values of θ and A are assumed to be common across economies. Empirically, θ is .55 to .57 [P & P, pp. 47, 47n], and P & P suggest (p. 38) that the annual trend growth of A is about .8%. By contrast, E is economy specific. The world technology frontier in Y is given by $W(A,K,N) = AK^{\theta}N^{1-\theta}$ and $R = 0$. Over time, A is rising, and E rises when TFP_Y grows faster than A and falls when TFP_Y grows more slowly. An economy is moving closer to the world technology frontier in Y when E is rising and away from this frontier when E is falling. If E and E^* are positively correlated over time when E^* is falling, moving away is not uncommon [eg., Salinas-Jimenez & Salinas-Jimenez 2011, p.115; van Ark, O'Mahoney, and Timmer 2008, p. 34; Young 1994, p. 970], keeping in mind that this frontier is itself advancing over time. P & P argue that differences in GDP per capita, both over time and at any point in time, result largely from differences in *TFP*. At any point in time, these differences reflect differences in E^*, and growth 'miracles' occur when E^* rises rapidly following a change in ψ and/or as a result of new opportunities for investment, production, or trade, which shift *TR* outward. Barring offsetting increases in S_Y, E will be rising (falling) when E^* is rising (falling).

If we classify economic growth in terms of its sources, *extensive* growth is growth from increases in inputs, notably capital, with TFP_Y or EA held constant. *Intensive* growth is growth from increases in EA with inputs held constant. The three types of growth are then: (a). *extensive*. (b). *intensive and based on technology catch-up—that is, on imported technology that is new to the importing country, but already in use elsewhere.* (c). *intensive and based on innovation—that is, on technology that is new worldwide.* Equation (2) gives:

$$y^g = E^g + A^g + \theta k^g, \qquad (3).$$

where the *g* superscript denotes rate of growth. Thus y^g is the sum of extensive and intensive growth rates of *y*, although the two types of growth are complementary in that an increase in TFP_Y raises the capital-to-labor ratio corresponding to any given marginal product of capital in *Y*.

In order to improve growth prospects, economies sometimes have to switch from one type of growth to another, which requires changes in the economic system and therefore entails switching costs. Each type of growth gives rise to rents that are threatened by such a switch, and rent seekers will therefore try to prevent, sidetrack, or delay the necessary reforms. It is here that Olson's distributional coalitions can cause problems. The greater are the differences between the skills and institutions associated with the two types of growth—and thus the greater is the destruction of rents in switching from one to the other—and the more amenable is the pre-reform system to rent seeking, the greater the costs of switching are likely to be.

III. The Production Trade-Off between Useful Output and Rent Seeking

E depends on *R* since resources used to seek rent could also produce *Y*. Besides this direct loss of efficiency from rent seeking, there is an indirect loss in the form of increases in allocative and X-inefficiency within the *Y* sector. These result from the supply restrictions and other interventions used to generate the rent that pays for the increase in *R*—see [Comanor and Leibenstein 1969]. The appearance of either kind of inefficiency is equivalent to a fall in *Y* if useful output is valued in the former competitive prices. *E* also depends on the specialized capital, *M*, used to import technologies and to implant them in the domestic economy, and on the specialized capital, *H*, used in new product research and development. These are distinguished from the capital, *K*, used in production. Let E_R, E_M, and E_H be the changes in *E* when, respectively, *R*, *M*, and *H* increase by one unit with the other variables fixed. E_R includes both the direct and the indirect costs of rent seeking. The former affects S_R and therefore S_Y, while the latter affects E^*.

On any equilibrium growth path, capital is assumed to be allocated efficiently between *K*, *M*, and *H*. This implies that the marginal product of *M* in terms of GDP or $\text{GDP}_M = E^*_M AK^{\theta}N^{1-\theta} = E^*_M GDP/E^* = GDP^*_K = \theta\text{GDP}/K$ and likewise with *H*, giving:

$$E^*_M = E^*_H = \theta E^*/K \quad (4).$$

when M and H are positive. E^*_M and E^*_H are then nearly zero. Let e^*_{EM} and e^*_{EH} be the partial elasticities of E^* with respect to M and H. Then the contribution of M to $(E^*)^g$, or $e^*_{EM}M^g$, equals $(\theta/K)dM$ where dM is the annual change in M, while $e^*_{EH}H^g = (\theta/K)dH$ is the contribution of H.

After an equilibrium is disturbed by new opportunities, dM may become large as an economy copies a backlog of existing technology that is newly available. Once this is done, however, dM will be small and dM/K will be tiny in numerical value. On an equilibrium growth path, the contribution of M to $(E^*)^g$ is largely to keep E^* from falling, except possibly as a result of rent seeking. The contribution of M to E^g is $e_{EM}M^g = [(\theta/K) + (S_{YM}/S_Y)]dM$ where S_{YM} is the change in S_Y caused by a unit increase in M. Thus S_{YM}/S_Y is likely to be tiny and $e_{EM}M^g$ to be small. The contribution of H to $(E^*)^g$ and E^g may also be small, but type (c) growth is not limited by a backlog of technology to be copied as is growth of type (b). If an economy has enough type (c) growth, $(\theta/K)dH$ could be significantly positive on or off an equilibrium growth path.

Because TR is downward-sloping and increases in R do not by themselves shift TR outward, $E_R < 0$ when $M = H = 0$. If profitable, these increases lower E_H by creating restrictions on competition from new products. As a result, increases in H lower E_R. In this sense, H and R are substitutes. The same may be true of M and R, but these can also be complements since R indexes the strength and scope of the interventions that generate rent, as well as rent seeking—when new rents are created, the marginal revenue of rent seeking shifts upward. An increase in R can raise E_M by making it easier to import and disseminate specific targeted technologies that are in use elsewhere, but new to the importing country. In this case, increases in M would also raise E_R, which could become positive during type (b) growth, a subject to which we shall return.

Subject to TR and to $Y = G + (Y - G)$, a government maximizes U, which is assumed to be strictly quasi-concave for any given ψ. If we first maximize U subject to $Y = G + (Y - G)$ for any given ψ, R, and Y, the support-maximizing division of Y into G and $(Y - G)$ occurs where $U_G = U_{(Y-G)}$ when $G > 0$. For simplicity, we ignore the error that arises because a unit increase in G implies a unit increase in V, which has an indirect effect on Y. When $U_G = U_{(Y-G)}$ at each value of Y, G can be written as $G = G(Y,R;\psi)$, which

implies $U = U(Y,R;\psi)$, with $U_Y = U_G = U_{(Y-G)}$. A change in R along TR then entails a change in G in the same direction, as will be shown. Let Y^i_R be the indirect change in Y resulting from the change in V when R increases by a unit, and let $MC^i_R = -Y^i_R$. Then MC^i_R is defined to include the effect on Y of both the increase in R and the associated increase in G—that is, of the entire change in V resulting from a unit increase in R.

The marginal rate of transformation along TR is $MRT = R_N/(Y_N + MC^i_R R_N)$ when R is plotted on the vertical axis, where R_N and Y_N are the marginal products of labor in R and Y. Here Y_N is the marginal direct cost of transferring a unit of N from Y to R, and $MC^i_R R_N$ is the marginal indirect cost. In the short run, we assume diminishing returns to labor in both sectors. As a result, TR is strictly concave from below when MC^i_R is non-decreasing in R. The complete first-order conditions for maximizing U are:

$$MRT = R_N/(Y_N + MC^i_R R_N) = MRS = U_Y/U_R = U_G/U_R = U_{(Y-G)}/U_R = (\pi_R)^{-1}, \qquad (5).$$

where MRS is the marginal rate of substitution of Y for R, and the subscripts on U indicate the marginal products of Y, G, $(Y - G)$, and R in raising U. In Figures 1(a) and 1(b), four maxima are shown, at A and B in Figure 1(a) and at B and C in Figure 1(b).

Let P^M be the point on TR where $R = G = 0$ and Y is maximized, say at Y^M, and let the U-subscript denote support-maximizing value. Then P^M is then the only efficient point on TR, as well as the point at which GDP net of distributional rent, or $(\text{GDP} - V) = (Y - G)$ is maximized. Let Y^m be the output at which V reaches its maximum possible value of V^m. Let R^m and G^m be the corresponding values of R and G. As shown below, the support-maximizing values of R, G, and V all change in the same direction along any TR in response to a shift in the isoquants of U. Thus R^m and G^m are also the maximum values of R_U and G_U, and Y^m is the minimum value of Y_U on TR. If $Y < Y^m$, $A \leq A^m$ must hold as well. Let P^m be the point (Y^m, R^m). Then U is lower when $Y < Y^m$ than at P^m, and all possible support maxima must lie between P^m and P^M. The portion of TR to the left of P^m is omitted in Figures 1(a) and 1(b) because no support maximum can lie there.

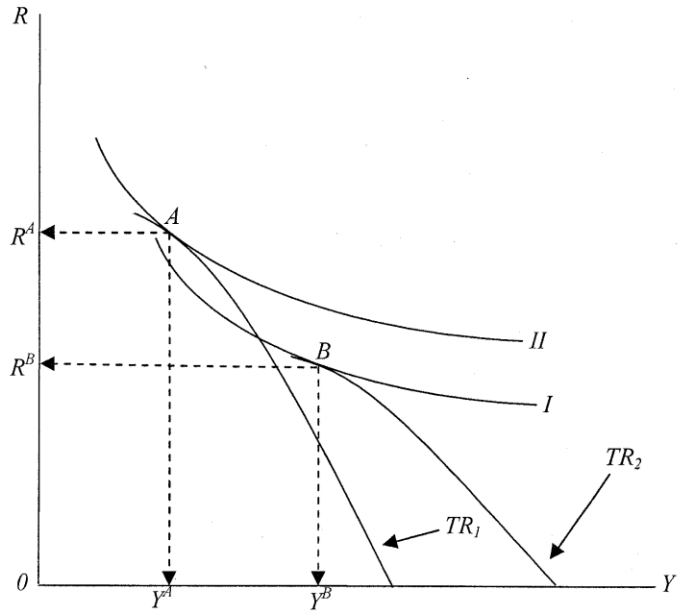

Figure 1(a)

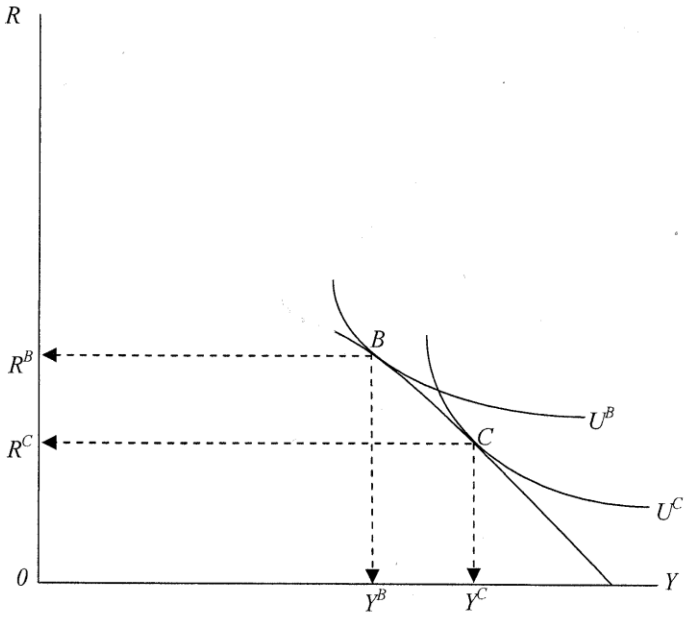

Figure 1(b)

Let the *U*-subscript denote support-maximizing value. From the theory of convex sets, the flatter

are the isoquants of U for any given TR—and thus the higher is $(MRS)^{-1}$, the demand price of R, at each (Y,R)—the higher R_U and the lower Y_U will be. This is shown in Figure 1(b), where U^B leads to higher R_U and lower Y_U than U^C. Likewise, for any given support function, U, let TR become steeper, in the sense that $(MRT)^{-1} = (Y_N/R_N) + MC^i_R$, the supply price of R, falls at each ratio, R/Y. Then R_U/Y_U will rise, as long as the substitution effect on R/Y of this shift determines the direction of change. In Figure 1(a), TR_1 shows a comparative economic advantage in rent seeking, while TR_2 shows a comparative economic advantage in useful output. The former reflects a relatively high endowment of capital, including human capital, that is specialized to rent seeking. A high endowment of this capital results from a high past demand for R, whereas a high past demand for capital specialized to useful output results from a high past demand for Y.

Suppose a political change raises the demand price of R at each (Y,R), causing the isoquants of U to become flatter, as in the shift from U^C to U^B in Figure 1(b). The short-run result is a move from C to B, which raises R_U and lowers Y_U. The higher demand for R also stimulates the demand for rent-seeking specialized capital, causing it to increase over the long run relative to capital specialized to Y. In turn, this causes the supply price of R to fall. TR shifts from TR_2 to TR_1 in Figure 1(a), and R_U/Y_U again rises, as in the move from B to A. Thus the short and long run effects of the political change are reinforcing.

IV. The Effect of Inclusiveness on Political Support.

The hallmark of a *non*-inclusive political system is an ability to divide society into insiders and outsiders in a way that allows a support-maximizing government to rely on insiders for most of its support. Government extracts rent from outsiders and transfers this to insiders—or gives insiders the means to do this—in return for support or the means of support. The political support of insiders thus depends on the rent they receive, whereas the support of outsiders depends on the income that remains after rents are extracted. As will be shown, when ψ is low, V_U will be high, implying relatively strong restrictions on supply that produce relatively high rents. When ψ is high, V_U will be low, and markets will be more competitive.

Government's total support, U, is assumed to depend on ψ and to be a non-decreasing function of insider support, U^I, and of outsider support, U^O. Given this, assumptions (a) and (b) determine U: (a). U^O is an increasing function of (GDP – V) = ($Y - G$), the income from producing Y, with marginal support value $U^O_{(Y-G)}$. U^I is assumed to be a non-decreasing function of sR, where $s(G,R)$ is government's expected share of total rent-seeking support, R, with marginal values $s_G \geq 0$ and $s_R \leq 0$ since an increase in R spreads a given G over more units of R. Finally, U^I is assumed to be non-decreasing in R and G with marginal products, $U^I_R = U^{II}(s + s_R R)$ and $U^I_G = U^{II}(s_G R)$, where $U^{II} \geq 0$ is the increase in U^I when sR increases by a unit. (b). Let ψ index a government's ability to rely on U^O for support, interpreted as the share of U attributable to U^O. Let $(1 - \psi)$ index its ability to rely on U^I. Then ψ depends only on the political system.

For any given ψ, (i) and (ii) imply that U is Cobb-Douglas in U^I and U^O:

$$U = [U^O(Y - G)]^{\psi}[U^I(R,G)]^{(1-\psi)}. \qquad (6).$$

Thus ψ measures the sensitivity of U to increases in GDP net of distributional rent vs. its sensitivity to increases in distributional rent. When $\psi = 1$, $U = U^O$ and $U_R = U_G = 0 = R_U = G_U$. The support maximum on any TR is at P^M where $(Y_U - G_U) = Y_U = Y^M$, the maximum value of Y on TR. Because the amount of rent measured in units of Y is finite, there can be no support maximum where $\psi = 0$, since $U_Y = U_{(Y-G)} = U_G = 0$ would then hold and both $\pi_R = (U_{(Y-G)}/U_R)^{-1}$ and total rent, $V = \pi_R R + G$, would be infinite. Let $\psi_m > 0$ be the value of ψ that gives a support maximum at P^m, the point of maximum rent extraction. Then ψ varies between ψ_m and one, and regardless of ψ, U is always increasing in $(Y - G)$, although the weight of $(Y - G)$ rises with ψ. No government can afford to ignore macro performance; support is never from rent alone.

A final assumption is: (iii). There are non-increasing returns to $(Y - G)$ in U^O in the sense that the second partial derivative, $U^O_{(Y-G)(Y-G)}$, is non-positive. Also G and R show diminishing returns and complementarity in U^I in the sense that the second partials, U^I_{GG} and U^I_{RR}, are negative and the mixed partial, $U^I_{GR} = U^I_{RG}$, is positive. A government uses increases in G to give rent seekers stronger incentives to support it, thereby raising U^I and U^I_R at each R. Assumption (iii) implies that U^I is strictly quasi-concave.

When $\psi < 1$, (6) implies that the ratio of $U_{(Y-G)}$ to U_G is given by:

$$U_{(Y-G)}/U_G = [\psi/(1-\psi)](U^I/U^O)(U^O{}_{(Y-G)}/U^I{}_G). \quad (7).$$

Since $U_G = U_{(Y-G)}$ is necessary for dividing Y into $(Y-G)$ and G in a support-maximizing way, suppose that $U_G = U_{(Y-G)}$ holds initially at each (Y,R). Thus $MRS = U^I{}_G/U^I{}_R$. If ψ then increases, $U_{(Y-G)}/U_G$ must rise at each point $((Y-G), G, R)$. By assumption (c) this requires G to fall and $(Y-G)$ to rise at each (Y,R) in order to restore equality. The fall in G raises $U^I{}_G/U^I{}_R$ at each given R, while the increase in $(Y-G)$ does not affect $U^I{}_G/U^I{}_R$. Thus an increase in ψ raises MRS at each (Y,R).

Greater inclusiveness therefore implies steeper isoquants of U and a lower demand price, $(MRS)^{-1}$, of R at each (Y,R). The shift from U^B to U^C in Figure 1(b) results from an increase in ψ. In general, the most basic effect of such an increase is to raise Y_U and lower R_U and G_U. G_U must fall when R_U falls—despite the increase in Y_U—for otherwise the support-maximizing value of $U^I{}_G/U^I{}_R = U_G/U_R$ would fall, by assumption (iii). It follows that G_U is positive when R_U is positive, which is whenever $\psi < 1$, the reason for positive G_U being that increases in G have political support value. Viewed as the supply price of R, π_R correlates positively with R along any given TR. Thus V_U is also decreasing in ψ. Less inclusive governments rely more on insiders for support and therefore need to extract more distributional rent, which requires them to be more protectionist.

Since utility comes only from consuming Y, a government will be secretive when ψ is low in order to hide the loss of Y from rent seeking and extraction of rent. Secrecy also provides a favorable environment for corruption, defined as the use of political office for personal gain. A polity with low inclusiveness will have a relatively high level of corruption, and governments will award positions with opportunities for corruption in return for political support. The support of a corrupt official, who is also an insider, is more valuable to a government when ψ is low than when ψ is high, while the support of outsiders who bear the cost of corruption is less valuable.

A ‘liberal’ democracy combines institutions of representation, which translate popular preferences into government policy, with institutions of restraint—such as an independent and impartial police and judiciary and a free press—that uphold basic rights and freedoms and limit government abuse of its power [Rodrik (1), 2014]. By upholding transparency and impartiality, such institutions also make it harder for rent seeking to raise political support. An autocracy may lack both kinds of institutions, whereas ‘illiberal’ democracies lack effective institutions of restraint, making it easier for governments wanting to rely on insiders for support to undermine institutions of representation. Likewise, without effective institutions of representation, institutions of restraint may be undermined. If external pressures require economic efficiency for a government to survive, however, even an autocratic ruler has an incentive to maintain effective institutions of restraint.

Such institutions are the backbone of an inclusive polity because they make it harder for rent seeking to raise political support. They may result from competition for power and a likelihood that power will change hands. As Rodrik notes, this motivates institutions of restraint to protect defeated governments and their supporters from abuse of power by their successors. As a result, effective institutions of restraint lower the cost to government leaders and their supporters of leaving power, which leads to a greater willingness to give up political offices voluntarily and to a lower longevity of government than when ψ is low. Because of this, effective institutions of restraint also allow competition for political power to become institutionalized in periodic elections, which enable power sharing over time via rotation of power. Thus a highly inclusive polity can more easily combine competition for power with stable government than can a polity whose inclusiveness is low.

One function of institutions of restraint is to supply at relatively low cost information that is useful in making political choices. In an environment with universal suffrage, free and fair voting, and political support measured in votes, a low cost of evaluating voting alternatives is a key to limiting the ability of politicians to extract rent [Chang, Golden, and Hill, 2010], which forces them to rely more heavily on

increasing GDP net of distributional rent for support. A government that is good at gaining political support in this way has an incentive to strengthen institutions of restraint.

In a democracy without free and fair voting and/or with a high cost of monitoring government, rent seekers have opportunities to supply money or resources for repression, persuasion, and/or manipulation that raise a government's vote above its level at P^M. High monitoring costs also give politicians captured by rent seekers space in which to court outsider votes by deflecting blame for economic dis-satisfaction away from themselves toward people of different nationalities, ethnicities, religions, ideologies, cultures, etc. [Rodrik (2) 2014]. In addition, outsiders may be led to over-estimate their wealth—eg., via creation of asset price bubbles that are not perceived as such—resulting in a high demand for Y via the wealth effect. When these bubbles burst, a fall in perceived wealth and thus in demand occurs, causing a recession to follow the boom.

Even rulers of autocratic polities face competition for power—through history, dictators have had to deal with disloyalty, insurrections, plots, the emergence of rivals, the erosion of their power, etc.—any of which can cause s to be less than one. Such a government relies on an elite base of supporters [Wintrobe 2004] to sustain it in power. To be strong, however, an autocracy needs to be able to restrict competition for the support of these insiders. Repression is one way to restrict this competition, and effective rent seeking also imposes two loyalty requirements. First, $U^I_R \geq 0$ implies $\varepsilon_{sR} = -(s_R R/s) \leq 1$ at the support maximum. When R increases by x percent with G fixed—which dilutes the incentive to support the government—s must fall by no more than x percent. Second, when $\psi < 1$, $MRS = U^I_G/U^I_R = s_G R/(s_R R + s) = MRT$ at the support maximum. If R is then high, U^I_G/U^I_R must be low because MRT is low.

Thus a strong autocracy requires s to be insensitive to changes in R and G, in the sense that s_R/s and s_G/s are tiny in numerical value. The ceiling on rent extraction reinforces this requirement. To meet it, autocrats would select and promote insiders whose inherent loyalty to the ruler is high, where 'inherent' loyalty is loyalty that stems from shared attributes, values, goals, and experiences—more generally, on factors other than G.

Inherent loyalty, indexed by λ, is a substitute for G and is complementary with R in the sense that an increase in inherent loyalty raises s at any given G and R and lowers s_G and $-s_R$, thereby making s less sensitive to changes in G and R, which lowers *MRS*. An increase in inherent loyalty therefore lowers u_G at any given R, which raises the support-maximizing ratio of $(Y - G)$ to G at each R. Potentially this allows both U^I and U^O to be higher at the support maximum by reducing the amount of rent needed to reach any given level of U^I. However, the use of loyalty as a success criterion also implies a substitution of inherent loyalty for competence, causing *TR* to shift inward, although the protections and restrictions that accompany types (a) and (b) growth lower the demands on managerial and administrative ability, thereby reducing this inward shift.

An actual or prospective government has a comparative political advantage in U^I at any point on *TR* when $U^I > U > U^O$. It has a comparative advantage in U^O when $U^O > U > U^I$. Comparative political advantage depends on initial conditions and on whether a government faces more intense competition for the support of insiders or for the support of outsiders, as measured in each case by government's share of total support. By initial conditions is meant the initial values of R_U, G_U, Y_U, and ψ, as well as the initial endowment of capital specialized to rent seeking vs. that specialized to useful production. These capital endowments reflect past values of ψ and determine comparative economic advantage.

Suppose a government with a comparative political advantage in U^I comes to power when ψ is midway between ψ_m and one. Such a government can raise U if it is able to change the political system in a way that lowers ψ, thereby raising R_U and G_U and lowering Y_U. As long as the first loyalty requirement above is met, this increases U^I and lowers U^O, thereby strengthening the original comparative advantage as well as the incentive to accumulate capital specialized to rent seeking. Potentially this is the road to serfdom.

A government with a comparative advantage in U^O when ψ is mid-range can raise U if it is able to strengthen institutions of restraint and otherwise make the political system more inclusive. Here the quest for political support becomes the road to an inclusive polity, although subject to the ability of insiders to impose switching costs that reduce government's comparative advantage in U^O. It helps a government with

such a comparative advantage to emerge if competition for insider loyalties prevents one or both of the loyalty requirements above from being met when R is high, thereby ruling out a strong and stable autocracy.

Because any government is likely to have a comparative advantage in either U^I or U^O, efforts of governments to raise their support will move ψ away from mid-range, and political and economic systems that are initially similar can become quite different in consequence. In this context, a prior comparative economic advantage in rent seeking makes a comparative political advantage in U^I more likely, but a prior comparative political advantage in U^I also leads to accumulation of rent-seeking specialized capital, which can lead to a comparative economic advantage in rent seeking. In this sense, comparative political and comparative economic advantage reinforce one another.

V. How Types (a) and (b) Growth Affect Efficiency

Economies with low initial capital-to-labor and/or technology levels can often use government intervention to speed up growth of type (a) or type (b) for a time. A state with a comparative political advantage in U^I would use its leverage over resource allocation to increase savings and to channel these into priority sectors for investment. In type (b) growth, the technologies to be imported are understood and have known requirements for effective utilization. Such growth can be implemented via forced saving and channeling of resources, and the same is true of growth of type (a). Thus in promoting type (a) or type (b) growth, governments have also promoted rent seeking by raising the return on rent-seeking investment—increasing V via the interventions used to promote growth—and lowering the return on investment in Y (lowering Y_K). This has been done by restricting some types of profitable investments in order to protect existing rents and by ramping up other kinds of investments, causing capital-to-labor ratios to rise faster than the rate of *TFP* growth will allow if the marginal product of capital remains constant.

One result of this approach is a build-up of rent-seeking specialized resources—a comparative political advantage in U^I generating a comparative economic advantage in rent seeking—although this takes time and occurs after the initial spurt of growth. By the time priority industries catch up with best practices elsewhere, the

economic gain from promoting them further vanishes. The economy is left with subsidies, restrictions, and controls that lower innovation and competition, but are politically hard to remove since political support depends on protection and the rents it generates. Another possible result is the "middle income trap," in which types (a) and (b) growth lead to middle-income status, but no higher because investments that could break the trap are blocked by protection of existing rents or crowded out by rent seeking, which yields a higher return to investors.

The lower is the political support value of special interests and rent seeking, the more leeway a support-maximizing government has to implement efficient outcomes that meet its distributional support needs—in particular, to allow sectors or occupations to decline or to adopt new technologies that destroy existing rents. A special interest will be reluctant to allow the sector it represents to decline because this would lower its political influence [Acemoglu and Robinson 2001]. Instead, it will lobby for supply restrictions and subsidies that raise the demand for the capital, labor, and natural resources of its constituents.

Nevertheless, conventional analyses of types (a) and (b) growth assume that rent seeking is absent. Suppose that this is initially true. Since $Y_K = y_k = \theta Y/K = \theta y/k$ then holds we have:

$$k^g = y^g - (y_k)^g, \qquad (8).$$

where $(y_k)^g$ is the rate of change of y_k over time. Substituting (8) into (3) gives:

$$y^g = [(E^g + A^g) - \theta(y_k)^g]/(1 - \theta) \text{ or } (y_k)^g = ((1-\theta)/\theta)[E^g + A^g - y^g] \qquad (9).$$

Growth of TFP_Y increases y_k at each capital-to-labor ratio, thereby raising the value of k that goes with any given y_k. In this way, increases in EA create new opportunities for extensive growth, the complementarity between extensive and intensive growth referred to earlier. With $\theta = .57$, a .8% increase in A, with E constant, raises the value of k corresponding to any given y_k by 1.86%.

Equation (9) becomes $y^g = k^g = A^g/(1-\theta)$ when E and y_k remain constant. If $A^g = .8\%$, both k and y will then grow by 1.86% per year when $\theta = .57$. Over half of this growth is from capital deepening rather than from increases in TFP_Y, which is why all nations that have achieved modern economic growth have dramatically raised their capital-to-labor ratios. The net effect of the increase in EA plus the capital deepening that it induces is to leave K/Y and $(dK)/Y$ (the net investment share of Y) constant. Even though

most of the growth of y is extensive, the intensive part is crucial in limiting the fall in $y_k = Y_K$. From (9), if y grows at a constant rate in an economy unable to generate intensive growth, y_k will be falling at $(1-\theta)/\theta$ times that rate. This makes rent seeking an increasingly attractive investment option and strains the assumption of zero rent seeking to the breaking point.

Let σ be the propensity to save out of current income. Setting intended gross investment plus the current account balance equal to intended domestic saving gives:

$$\sigma = [(dM + dH + dK) + \Delta + NX]/\text{GDP} \qquad (10).$$

where $(dM + dH + dK)$ is net investment or the sum of net increases in the three types of capital mentioned earlier, Δ is depreciation, and NX is the current account balance—the most important component of which is net exports. Thus σ is the share of gross investment plus the current account balance in GDP.

The size of σ is a constraint on the expansion of investment or of net exports and thus on growth, especially export-led growth, which a government with a comparative political advantage in U^I might choose as a way of combining entrepreneurship on export markets with protectionism at home. Instead of allowing interest rates to rise when investment demand increases, such a government might choose an intervention like credit rationing that keeps rates lower on official credit markets, but allows access to credit based on priority. Low-priority borrowers then have to build up their savings in advance of large purchases or retirement or in order to prepare for a rainy day, etc., while high-priority borrowers benefit from low rates and good access. Such a scheme can both raise σ and prioritize investments. However, the resulting system of privileges may be hard to undo when it becomes obsolete, since the government will be relying on the political support of those who are receiving rents.

Mainly extensive growth outside the space and defense sectors was a feature of the state-managed Soviet-type economy (STE), a planned and controlled system with many quotas, restrictions, and subsidies. These interventions may have increased growth for a time by creating forced savings, rapid capital accumulation starting from a low base, and strong incentives for labor to migrate from agriculture to industry. In the Soviet Union, GDP per capita grew over 1928-1990 by an annual average of 2.6% to 5 times

its original level [Ofer 2008], although nearly all of the sustainable growth occurred before 1970. A falling marginal product of capital was documented by Weitzman [1970] as early as the 1960s, and relative to the U.S., Soviet GDP/capita peaked at 37.5 % in 1970 [Ofer 2008]. After 1970, the Soviet capital-to-labor ratio soared, while the marginal product of capital fell rapidly [Easterly and Fischer 1995, p. 358]. By the Gorbachev years, the economy was stagnating, with GNP/capita rising by just .4% per year over 1986-1990 and then falling in 1991[Ofer 2004]. Using a Cobb-Douglas production function, the growth of *TFP* averaged a half percent per year over 1950-87. This rate of growth was slowing and became negative during the 1970s until the end of Soviet Union [Ofer 2004, Table 1].

If the elasticity of substitution (ε_S) is less than one, as Weitzman and Easterly/Fischer [1995] believed to be true of the Soviet economy, growth will slow more sharply as k rises, since the greater difficulty of substituting capital for labor causes the marginal product of capital to fall faster. Under constant returns to scale, $(-y_{kk}/y_k) = (1 - \theta)/\varepsilon_S k$. The lower is ε_S the faster y_k will fall, and as ε_S tends to zero, the rate of decrease tends to infinity. The argument for low ε_s is that the high rate of Soviet investment made it hard for planners to substitute capital for labor in old production facilities at the same time that they were building new ones. As a result, much capacity lay idle for want of labor [Ofer 2008]. This co-existed with widespread overstaffing of firms, which is to say that resource utilization was poor.

Easterly/Fischer originally estimated ε_S to be .37 for the Soviet economy (pp. 355-357), later corrected to .49 [Easterly and Fisher 2008], following criticism by Beare [2008]. Using $\varepsilon_S = .49$, they estimate *TFP* growth to have been falling over 1950-1987, reaching near zero in 1987, by which time E^*—and E if the two were positively correlated—was also falling since A was rising. Thus regardless of whether ε_S was below or equal to one, E^* and E were falling well before the end of the Soviet Union. Falling profitability of state firms at official prices plus their financial indiscipline (the soft budget constraint [Kornai 1980]) caused growing budget deficits, since tax revenues depended on profitability. These deficits were mostly monetized, causing repressed inflation in the form of rising differences between demand and official prices, which generated increased rent seeking in the form of efforts to take advantage of these growing

differences. In Russia, the freeing of consumer prices in January 1992 caused them to more than double from official levels at the end of 1991.

The STEs also left a legacy of resistance to market-oriented reforms in successor transition economies by those whose rents were threatened [Aslund 2002, ch. 9]. Rent seeking weakened the impact of economic reform except where new elites with both a comparative political advantage in U^O and decisive political support could emerge. Because the skills/institutions of a Soviet-type economy and those of an efficient market economy are quite different, the costs of switching were high, and this helped the STE to survive for many years despite poor performance. Over 1970-91, there was hardly any net growth of GDP per capita in the Soviet Union, and in Russia, GDP plunged by nearly 40% in 1992, the first year of transition; growth did not resume until 1999 [Ofer 2008].

Intensive growth of type (b) must die out as E approaches one or as the economy catches up to best practices elsewhere. Because of rent seeking induced by efforts to promote and direct growth, however, E may never get to one. To track the effect on E of type (b) growth, let $e_{EM} = E_M(M/E)$ and $e_{ER} = E_R(R/E)$ be the partial elasticities of E with respect to M and R. In absence of type (c) growth, the role of H will be small, and if we ignore this, the growth rate of E is approximated by:

$$E^g = e_{EM}M^g + e_{ER}R^g. \qquad (11).$$

From what was said earlier, E_R and e_{ER} will be negative unless increases in R raise E_M. Moreover, $e_{EM}M^g = [(\theta/K) + (S_{YM}/S_Y)]dM$ is likely to be small in numerical value along an equilibrium growth path, although it could be large if M is changing rapidly as the economy moves from one equilibrium growth path to another. Otherwise, E^g and R^g will be opposite in sign; when R is rising, E will be falling. If a higher level of corruption implies a climate more conducive to the growth of R and if E^g correlates positively across countries with the growth of *TFP*, this is consistent with the findings of Salinas-Jimenez and Salinas-Jimenez [2011], since the costs that they assign to corruption could easily result from rent seeking more generally. The factors that favor corruption—secrecy and lack of openness or transparency in government—also favor other forms of rent seeking.

While corruption may appear to be less benign than, say, lobbying, each involves a transfer of wealth from those who are the victims of rent seeking to those who seek rent successfully, and each is likely to increase political support by a larger amount when the victims are unaware of the transfer. Each also involves competition for rent—eg., competition between lobbyists for favors and competition for political offices with opportunities for corrupt gains.

When increases in R raise E_M, increases in M will raise E_R, keeping in mind that R not only indexes rent seeking, but also the strength and scope of the interventions that generate rent and rent seeking. Then E_R could become positive and E_M could become large for a time following the appearance of new opportunities to shift TR outward that disrupt the old equilibrium growth path. In this case, the marginal indirect cost of rent seeking would be negative and numerically greater than the positive marginal direct cost. For example, developed nations might raise the access of developing nations to their technology and domestic markets without requiring reciprocity, thereby offering new opportunities for poorer nations to import technology, to learn to use it in production, and to expand exports of products based on it. If E_M is high in consequence, rapid growth can be achieved by growing M rapidly and by rapidly accumulating capital that embodies the imported technology, taking advantage of the complementarity between intensive and extensive growth. If (10) holds initially, before the new opportunities appear, exploiting these opportunities will require σ to rise.

In these conditions, the approach to managing growth will depend on whether the government of the importing nation has a comparative political advantage in U^I or U^O. If its advantage is in U^O, government will rely more on markets and less on interventions to alter market outcomes. Interest rates will rise. Sectors prioritized for investment will face higher borrowing rates, along with everyone else, which will slow their growth by making it more expensive to raise the necessary capital. If the advantage is in U^I, there will be more interventions, both to raise domestic saving (raise σ) and to channel savings into sectors prioritized for growth. Interest rate ceilings and credit rationing will play a larger role. The second approach has the potential to create more rapid growth for a time, but also creates more distributional rent and rent seeking,

which can sabotage growth later on by building up rent-seeking specialized capital and making government more reliant on rent seeking for support.

Subsidies, restrictions, and controls can raise E by making it easier to target and import technologies in priority sectors, to disseminate them rapidly and widely within the domestic economy, and to gain experience using them. The technology-importing country may also promote information and technology sharing between firms, thereby subsidizing the process of learning to make products based on the new technologies, albeit at some cost in terms of discouraging domestic innovation.

The interventions that generate rent and rent seeking represent an effort to "govern" the market [Wade 2004]. If successful, they will change comparative economic advantage within Y toward higher value-added products whose exports are promoted. Potentially this is both a strategy of import substitution and one of export promotion, as well as a policy of *dirigisme*, in the sense of promoting economic growth in specific sectors. However, this growth begins when the initial equilibrium path is disturbed by new opportunities and ends after these opportunities have been exploited. Once the basic machinery for raising σ and prioritizing investment is in place, further increases in R are likely to protect existing rents, thereby making it harder to change priorities when this becomes necessary to sustain growth. Thus they will no longer raise E_M. On the new path, e_{ER} will again be negative, $e_{EM}M^g$ will be negligible, and E and R will move in opposite directions; E will fall when R rises.

It is then time to switch to type (c) growth, but for a government with a comparative advantage in U^I, this conflicts with the support need to keep V high, which encourages protectionism, thereby crowding out innovation and new product R&D. In generating type (c) growth, moreover, *dirigiste* policies are of doubtful value. Successful *dirigisme* requires a government to know which industries, technologies, and production methods to promote and in which specific types of human and physical capital to invest. Without observable past experience as guide, this knowledge either does not yet exist or else is scattered among various economic agents—producers, consumers, researchers, etc.—and much of it remains tacit. An advantage of markets originally noted by Hayek [1945] is that they can work well without this information being centralized. Type (c)

growth requires competition, well-developed financial markets, and freedom from market and trade distortions. Supply restrictions such as credit constraints, which are endemic to type (b) growth, are a major barrier to the entry and expansion of small firms and thus to innovation and the development of technologically sophisticated products [Aghion, Harmgart, and Weisshaar 2008, esp. pp. 50-54].

The prognosis improves if a government with a comparative political advantage in U^O can eventually come to power. Such a government will have an incentive to make the political system more inclusive and markets more competitive by weakening supply constraints and strengthening institutions of restraint. However, prior investment in rent-seeking-specialized capital will make a comparative political advantage in U^O less likely. The best opportunity for reform arises when competition for insider support leaves non-inclusive governments unable to meet one or both loyalty requirements above when R is high, since U will then be low if ψ is low. The need to meet these requirements is a potential Achilles heel of a polity with low inclusiveness, but supporters of the reforms needed to raise ψ would have to overcome efforts of special interests to sabotage these reforms by finding and bringing to power a government able to meet the loyalty requirements in question.

VI. Type (b) Growth in East Asia

Several nations in East Asia are examples of type (b) growth in which government played a leading role—in facilitating technology imports, in disseminating technologies to domestic producers, in assisting their learning to use these technologies, and in channeling resources into targeted growth sectors. These nations promoted export-led growth, building efficient export industries in the process. For three decades and more, they achieved an economic 'miracle', using a model that included large public investments in infrastructure and technical education plus targeting of sectors whose growth was to be promoted. Targeted industries were subsidized and protected, and large investments were made in them. This required controls on financial markets that channeled loans to favored borrowers—who were initially not competitive on

world markets—as well as barriers to imports, which were often tightly controlled, thereby protecting the domestic market.

The East Asian economies also built up their human capital and shifted comparative economic advantage within *Y* toward higher value-added products. However, Young [1994], Krugman [1994], and others argue that East Asian growth came mainly from capital deepening and increased labor force participation rather than from *TFP* increases, which were lower than in many slower-growing nations. Average capital productivity fell in most Asian economies, and capital deepening was the main source of labor productivity growth [APO 2015, pp. 85-90]. Yet there is evidence that official statistics understate the growth of *TFP* in Singapore and Taiwan and overstate the growth of capital in Singapore [Hsieh 2002].

For many years, Japan provided the growth model for much of East Asia. Japanese experience appeared to prove that government intervention in the form of industrial policy could raise growth. More recently, Japan has been viewed as a stagnant economy with too many resources tied up in thousands of 'zombie' firms that are bankrupt, but continue to operate because of generous credit subsidies in the form of loans that are constantly renewed even when borrowers do not service them and have no ability to pay them back. As a result, there is little credit available for innovation or founding of new firms, which are at low levels, effectively being 'crowded out,' not only by credit rationing, but also by other forms of protectionism.

Annual growth of real GDP per capita in Japan, measured in purchasing power parities of 2005, averaged 8.2% over 1960-73 during the economic miracle, but then fell to just 1.2% over 1990-2007 [U.S. Department of Labor 2008]. Relative to the U.S., Japanese per capita GDP peaked in 1991 and is now below Taiwan [APO 2015, p. 37]. In Taiwan, the fastest growth of GDP/capita (in 2001 prices) occurred over 1975-1990, at 7.4%, falling to 3.4% over 2000-2007. Growth of GDP per capita also slowed in Singapore and South Korea.

To examine the evolution of *E*, we assume that *E* and *TFP* change in the same direction over 20 years or more since we only have data for *TFP*. According to the APO Productivity Databook for 2015, the contribution of *TFP* growth to the growth of GDP was lower over 1990-2010 than over 1970-1990 in Hong

Kong, Malaysia, Thailand, Taiwan, and Japan, although it rose in South Korea. Over the entire period, 1970-2013, it averaged about a half percent in Japan vs. just under 2% in Taiwan, 1.7% in South Korea, and .4% in Singapore [APO 2015, pp. 77-78].[1] This suggests that *E* fell in Japan and Singapore, but rose in Taiwan and South Korea, both of which became democracies during this period. These results must be qualified by the observation that APO overestimates *TFP* growth by failing to net out growth due to improvements in the quality of labor. Moreover, [Hsieh 2002] argues that *TFP* growth should be adjusted upward by about 2% per year for Singapore and one percent per year for Taiwan, although his reference period is shorter than the periods used here. Thus *E* may well have risen in Singapore, which faces strong external pressures to be efficient.

VII. Conclusion: Rent Seeking and the Role of Government

Government efforts to grow the economy more rapidly by replacing or "governing" the market often worked for a time, when initial conditions were right, but subsequently gave way to stagnation in Soviet-type economies and Japan and to growth slowdowns in other East Asian economies. The main culprit was rent seeking. In order to preserve rents, it prevented reforms that could have sustained or revived growth. Rent seeking was encouraged because it provided political support. The antidote was therefore a government with a comparative political advantage in U^O and thus an incentive to expand the role of institutions of restraint. However, supporters of a minimal economic role for government drew a quite different lesson from the Soviet and East Asian experiences, which reinforced their belief in the efficiency of self-regulating markets. The idea of efficient, self-regulating financial markets replaced older views, including that of Adam Smith, who had argued in favor of government regulation to avoid 'endanger[ing] the security of the whole society [Smith, p. 324].'[1]

In the United States, lax financial regulation helped lead to the financial crisis and "Great Recession" of 2008-9, although government policies also played a role. Opportunities for rent seeking arose from a rapid increase of property values caused by easy money in combination with government promotion of home

ownership. Together with regulatory gaps, this promotion allowed lenders to issue and then to sell low-quality mortgages at little risk to themselves. A ready market for these "sub-prime" mortgages relieved lenders of the cost of borrower default, which they passed on to buyers of mortgages and of mortgage-backed securities. As a result, low-quality mortgage lending grew rapidly, and low-quality (sub-prime and non-prime) mortgages came to encompass over half of all mortgages. After issuing these mortgages, the issuing bank or shadow bank would either sell them outright or cut them into pieces that were pooled with pieces of other mortgages to produce securities that were sold.

The ready market for these mortgages arose because the quasi-public mortgage giants, Fannie Mae and Freddie Mac, stood ready to buy mortgages at high prices, which they then securitized and sold. Ultimately, the lending frenzy depended on the generosity of Fannie and Freddie and on buyer over-valuation of mortgage-backed securities. Their quality was not transparent, and bond ratings agencies were captured by securities issuers, resulting in ratings that were too high. The bull market spawned by easy money and home ownership promotion also contributed to the over-valuation. Rising property values led to rising prices of mortgage-backed securities, which provided good returns to securities buyers as long as real-estate prices kept rising.

At first, monetary policy accommodated this process, but in 2004 the Federal Reserve changed course abruptly and began tightening money and credit. It raised interest rates 17 times over 2004-2006—the discount rate rose from 1% to 5.25%—and then began lowering rates again. House prices peaked in mid-2006 after rising for 15 years and then began to fall. When this fall speeded up over 2007-2008, borrowers often found that they owed more on their mortgages than their properties were worth, in addition to which sub-prime borrowers faced low initial payments, which then escalated. These factors caused many mortgage holders to default, which revealed the riskiness of securities based on these mortgages. As a result, the demand for them imploded, causing the sub-prime mortgage market itself to collapse in 2007, since the inability to sell these mortgages forced issuers to begin accepting default risk. The home ownership rate went up and then back down; in 2014 it was below the 1995 level [Callis and Kresin 2014, 2015].

Soaring property values boosted demand via the wealth effect, and households went deeply into debt. The subsequent fall in values of real estate and mortgage-backed securities put the wealth effect into reverse. For lenders, the riskiness of lending also rose, especially to small borrowers whose net worth had declined and who lacked access to government bailout funds. The fall in the demand of households and small firms for durable goods—which was intensified by higher borrowing costs and tighter credit—was the main cause of the general economic decline and subsequent slow recovery.[2] In particular, the crisis reduced employment in financial services, where rent seeking had been intense, and in sectors, especially construction, whose demand had been buoyed by rent seeking.

The shadow banking system—consisting of financial intermediaries that provide credit and liquidity, but avoid regulation by selling securities instead of accepting deposits and do not benefit from the insurance systems that support banks—grew during the housing bubble to become larger than the banking system. When the bubble burst, the shadow banks suffered the equivalent of bank runs and became the part of the financial system that shrank the most. Fannie and Freddie received government bail-out funds, as did private "too big to fail" financial institutions, and interest rates have since remained low, at high cost to savers. (Most of the bail-out funds were subsequently paid back, however; indeed the government has taken far more in profits earned by Fannie and Freddy than the latter received during the financial crisis.)

The siphoning of resources into rent seeking is a key problem facing any society. This can become the road to serfdom, not just because of efficiency issues, but also because a high level of rent seeking signals secrecy in government, corruption, and unequal treatment of insiders and outsiders in the form of barriers that constrain social mobility and equality before the law and perpetuate greater economic opportunity for some than for others. In these ways, the inclusiveness of a political system reflects the very nature of the society in which it is embedded.

NOTES

*I am indebted to Sarah Aboul-Magd for drawing the diagrams.

1. See also Cassidy [2009] and Krugman [2009].

2. For an extended discussion and partly different point of view, see Krugman [2009, chs. 7-10].

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